(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: HANDLING A DEVICE RELATED OPERATIONJ IN A VIRTUALIZATION ENVIRONMENT

(57) Abstract: Methods, system and machine-readable medium are described to handle a device related operation in a virtualization environment. In some embodiment, a kernel component of a virtual machine monitor may determine that a device related operation happens in a virtual machine through a operation transition from the virtual machine to the kernel component; and may determine whether the device related operation can be handled by a first virtual hardware device installed inside of the kernel component of the virtual machine monitor. In other embodiment, the kernel components may initiate an interrupt by the first virtual hardware device; and inject the interrupt from the first virtual hardware device to the virtual machine through another operation transition from the kernel component to the virtual machine.